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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,327	09/10/2003	Show-Mon Li	BHT-3204-51	1882

7590 04/13/2004  
BRUCE H. TROXELL  
SUITE 1404  
5205 LEESBURG PIKE  
FALLS CHURCH, VA 22041

EXAMINER

GALL, LLOYD A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,327

Applicant(s)

LI, SHOW-MON

Examiner

Lloyd A. Gall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION**

The disclosure is objected to because of the following informalities: The written description includes numerous grammatical errors, and the specification should be closely reviewed/amended by applicant where appropriate. Examples include: On page 3, "rocked" should read --rocket--. Throughout page 2, "3-D" is inaccurate. On page 4, line 17, "rock" should read --lock--, and the entire sentence of page 4, lines 17-19 is grammatically incorrect.

Appropriate correction is required.

Claims 1-6 are objected to because of the following informalities: On page 6, line 5, "longer" than what is being referred to? On page 6, line 6, "rocked" should read --rocket--. On page 6, line 9, "lock" should apparently be replaced with --lock body--. On page 6, line 9, it is not clear what is meant by "can provide the locking bolt". On page 6, line 9, "a rocket" should be replaced with --the rocket--. On page 6, line 11, "couple fixing" is not clear. On page 6, lines 12-13, "for providing the interlock ...and the lock body" is not clear whether segment 213 or segment 222 in fig. 1 is being claimed, or if both are being claimed. On page 6, lines 14, 16, 19, 22 and 24, "tailor" should be replaced with --trailer--. On page 6, line 14, which mounting segment (213, 222) is being referred to? On page 6, line 17, "for an elastic pin" is not clear whether the pin itself is being positively claimed, or not. On page 6, line 19, it is not clear which segment 213, 222 "the mounting segment" is referring to. On page 6, line 20, "can" is not clear whether the cover 24 is being positively claimed, or not. See page 6, line 23

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also. On page 6, lines 24-25, "can be" is not clear whether the chain is positively claimed, or not. On page 6, line 23, the ring drain is not mounted to a cover with an inner screw hole. Rather, it is mounted to elements 251, 252 as set forth on page 3, lines 18-20 of the specification. Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Neal (571).

O'Neal teaches a lock capable of use with a trailer, including a rocket bolt 60, a lock body 70, a chain couple 158 in fig. 6, a long bar 62, a fixed end 66 with a long dimension, a locking bolt at the other end of the long bar 62 to be received in a lock body 70 having a key hole on its outer side, the mounting parts 150 of the chain couple define a ring (viewing the parts 150 along their axes) and include inner mounting holes 30 received on mounting segments between the end 66 of the bar and the lock body 70. As set forth in column 4, line 3, the couple 158 may be a chain.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neal (571) in view of Wyers (115).

Wyers teaches a threaded outer mounting segment 80. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an outer screw thread on the long bar of O'Neal, in view of the teaching of Wyers, the motivation being to receive a sleeve 52 of Wyers, to vary the outer diameter of the long bar, when desired.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neal in view of Wyers (832).

Wyers teaches a ring drain (to the left of lip 52 in fig. 7) to receive a cover 54, 58 of fig. 11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a ring drain and cover with the key lock of O'Neal, in view of the teaching of Wyers (832), the motivation being to protect the key lock from the elements such as dust and water.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyer in view of Bellino.

Heyer teaches a lock capable of use on a trailer, including a rocket bolt 11 including a long bar with a fixed end 12 having a long dimension, a lock body 16, 20 as seen in fig. 2 to lockingly engage the opposite end of the bar 11, and a strap 14, 14' including mounting parts at its ends to be received on mounting segments between the fixed end 12 of the bar 11 and the lock body 16, 20. With respect to claim 3, the nut 16 may be regarded as a part of the long bar 11, and includes a hollow hole 22 capable of

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receiving an elastic pin 21. With respect to claim 4, Heyer also teaches the capability of utilizing a cover 13, 16 with the bar 11. Bellino teaches a chain couple 12 of the cable type including mounting rings 33 with a hole as seen in fig. 3. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a cable-type chain couple with mounting rings having holes therein, for the strap 14, 14' of Heyer, since a strap and cable are well known substitutes for one another in the lock art.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Heyer reference as applied to claim 1 above, and further in view of Blais. Blais teaches a chain couple 51, 52 of the chain link type. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a chain of the link type for the chain couple of the modified Heyer reference, since chains, straps and cables are well known substitutes for one another in the lock art.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 703-308-0828. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LG LG  
April 8, 2004

  
Lloyd A. Hall  
Primary Examiner